

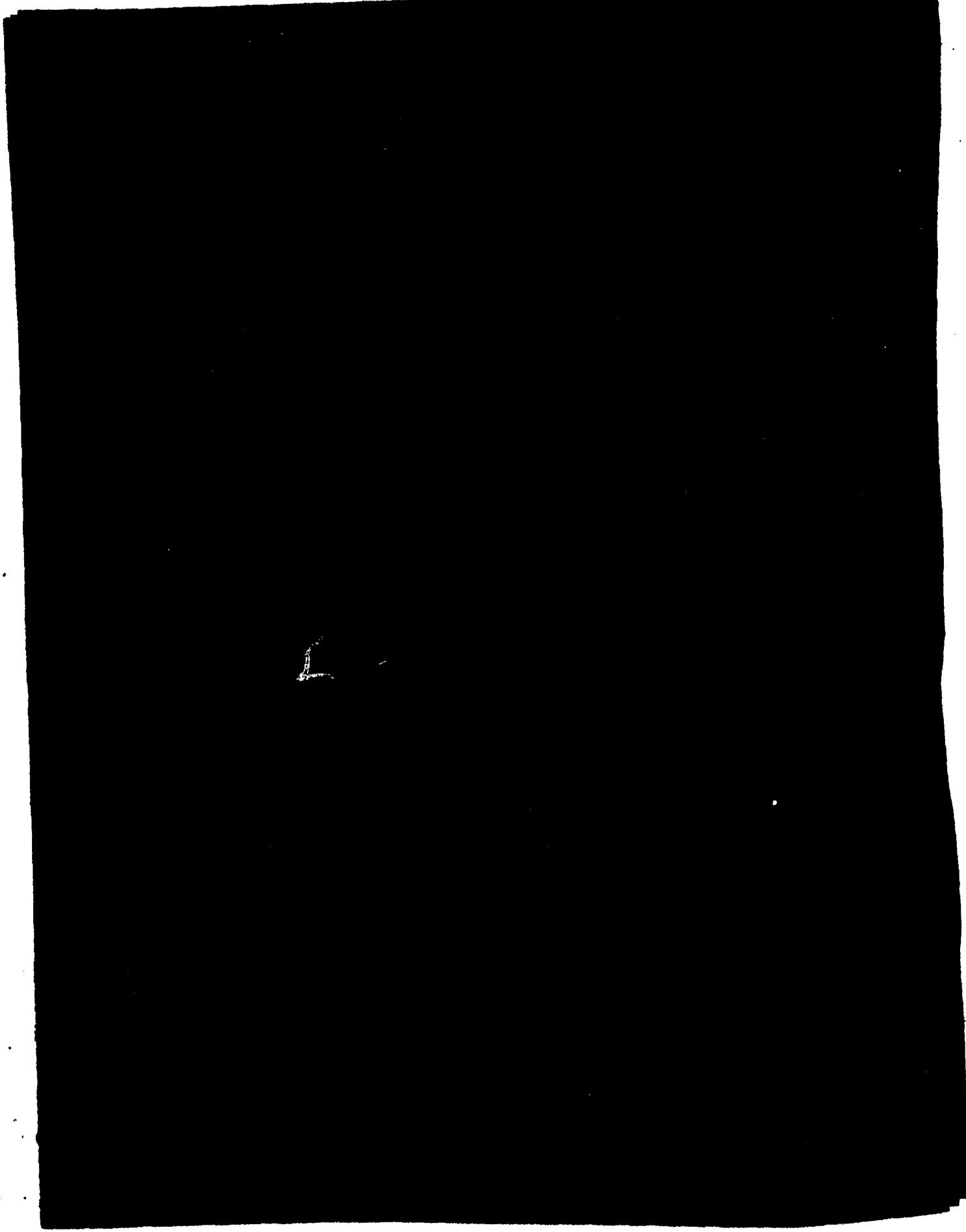
AD-A081 624 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2  
12828F LANCE, MISSILE NUMBER 2222, ROUND NUMBER 337-DSL, 11 OCT--ETC(U)  
OCT 79

UNCLASSIFIED ERADCOM/ASL-DR-1070

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) 1. Ballistics 2. Meteorology 3. Wind		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 12828F LANCE, Missile Number 2222, Round Number 337-DSL are presented in tabular form.		

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## INTRODUCTION

12828F LANCE, Missile Number 2222, Round Number 337-DSL, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0800 MDT, 11 October 1979. The scheduled launch time was 0800 MDT.

## DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm/m}^3$ ), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

#### b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

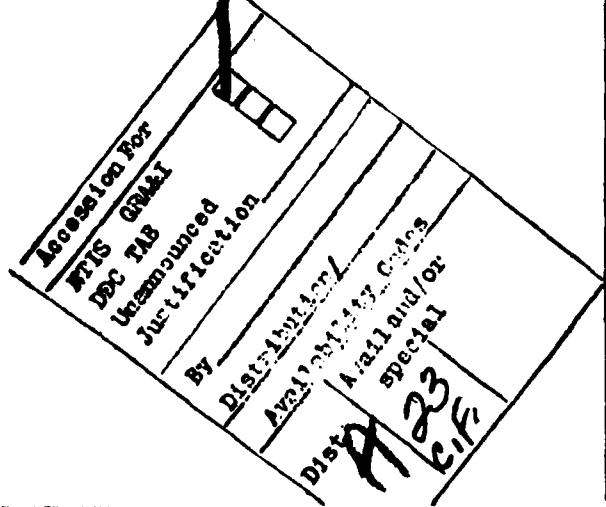
### SITE AND ALTITUDE

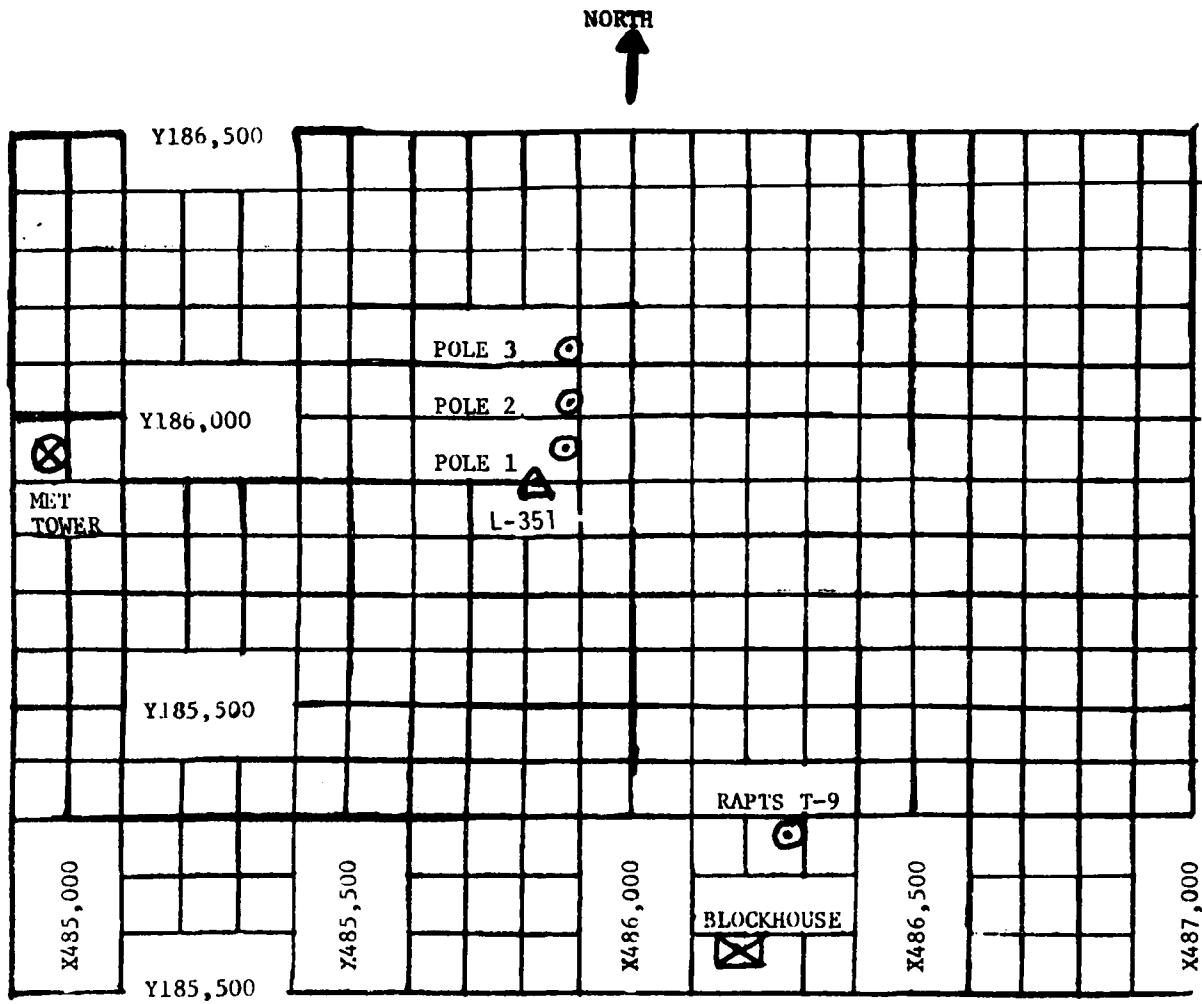
LC-33 3000 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to as high as possible in 500-feet increments.

### SITE AND TIME

WSD 0650 MST  
APA 0600 MST  
NW30 0650 MST





1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
  - (a) Pole #1 - 38.7 ft
  - (b) Pole #2 - 53.0 ft
  - (c) Pole #3 - 83.6 ft
3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface Observations taken at 0800 MDT,  
11 October 1979, at LC-33, 12828F LANCE,  
Missile No. 2222, Round No. 337-DSL.

ELEVATION	3977.30	FT/MSL
PRESSURE	881.6	MBS
TEMPERATURE	8.5	°C
RELATIVE HUMIDITY	61	%
DEW POINT	1.4	°C
DENSITY	1086.5	GM/M <sup>3</sup>
WIND SPEED	CALM	KTS
WIND DIRECTION		DEGREES
CLOUD COVER	CLEAR	

LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	185	04	-30	187	03	-30	180	04
-20	185	04	-20	183	02	-20	180	04
-10	185	04	-10	183	03	-10	180	04
0.0	185	04	0.0	184	03	0.0	180	04
+10	186	04	+10	184	03	+10	180	04

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft AGL

TABLE 2

TYPE 12828F LANCE MISSILE NO. 2222 ROUND NO. 337-DSL

LAUNCHED FROM LC-33 DATE 11 October 1979 TIME 0800 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1 12 Feet			LEVEL #2 62 Feet		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	MISG	03	-30	190	01
-20	MISG	02	-20	190	01
-10	MISG	03	-10	190	01
0.0	MISG	02	0.0	190	01
+10	MISG	02	+10	190	01
LEVEL #3 102 Feet			LEVEL #4 202 Feet		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	180	02	-30	185	02
-20	182	02	-20	185	02
-10	182	02	-10	185	02
0.0	182	02	0.0	185	02
+10	182	02	+10	180	02

WTSM COORDINATES: X484,982.64 Y185,057.73 H3983.00 (base)

TABLE 3

TYPE 12828F LANCE MISSILE NO. 2222 ROUND NO. 337-DSL

LAUNCHED FROM LC-33 DATE 11 October 1979 TIME 0800 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

PILOT BALLOON MEASURED WIND DATA  
(30 meter increments)

TABLE 4

RELEASED FROM LC-33 DATE 11 October 1979 TIME 0750 MDT

RELEASE POINT COORDINATES (WSTM) X=486,037.24 Y=182,350.16 H=3977.30

MISSILE TYPE 12828F LANCE MISSILE NO. 2222 ROUND NO. 337-DSL

MISSILE LAUNCHED FROM LC-33 DATE 11 October 1979 TIME 0800 MDT

NOTE: WIND DIRECTION ARE REFERENCED TO TRUE NORTH

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED KTS
SFC		CALM
30		CALM
60		CALM
90		CALM
120		CALM
150	020	02
180	355	03
210	001	05
240	007	07
270	002	07
300	356	07
330	014	06
360	031	05
390	028	05
420	025	04
450	014	04
480	002	03
510	008	03

HEIGHT mtrs AGL	DIRECTION DEGRFFS	SPEED KTS
540	013	03
570	019	03
600	024	02
630	342	02
660	300	01
690	323	05
720	346	08
750	352	08
780	357	09
810	349	09
840	341	10
870	343	11
900	344	11
930	352	11
960	360	11
990	352	14
1020	344	16
1050	346	16

RELEASED FROM LC-33

DATE 11 October 1979

TIME 0800 MDT

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1080	347	16
1110	348	17
1140	349	18
1170	351	20
1200	352	22
1230	353	22
1260	354	20
1290	353	21
1320	352	22
1350	354	22
1380	355	21
1410	350	20
1440	345	19
1470	348	19
1500	350	19
1530	348	19
1560	346	18
1590	340	18
1620	334	18
1650	326	18
1680	318	18
1710	320	18
1740	322	18
1770	321	18
1800	320	18
1830	317	18
1860	314	16
1890	310	17
1920	305	17
1950	307	16
1980	309	15
2010	309	15
2040	309	15
2070	308	15
2100	307	14
2130	309	16

PILOT BALLOON MEASURED WIND DATA  
(30 meter increments)

TABLE 5

RELEASED FROM LC-33 DATE 11 October 1979 TIME 0800 MDT

RELEASE POINT COORDINATES (WSTM) X=486,037.24 Y=182,350.16 H=3977.30

MISSILE TYPE 12828F LANCE MISSILE NO. 2222 ROUND NO. 337-DSL

MISSILE LAUNCHED FROM LC-33 DATE 11 October 1979 TIME 0800 MDT

NOTE: WIND DIRECTION ARE REFERENCED TO TRUE NORTH.

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED KTS
SFC		CALM
30		CALM
60		CALM
90		CALM
120		CALM
150	355	03
180	017	05
210	015	06
240	013	07
270	008	06
300	002	06
330	328	06
360	294	05
390	316	05
420	337	06
450	336	04
480	335	03
510	308	02

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED KTS
540	281	01
570	273	02
600	265	02
630	335	01
660		CALM
690	022	02
720	359	04
750	350	07
780	340	10
810	351	10
840	001	10
870	002	10
900	003	10
930	355	11
960	347	11
990	349	13
1020	350	14
1050	353	16

RELEASED FROM LC-33

DATE 11 October 1979

TIME 0800 MDT

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1080	356	18
1110	357	19
1140	358	19
1170	357	21
1200	356	22
1230	356	22
1260	357	21
1290	355	21
1320	352	20
1350	351	19
1380	350	18
1410	346	16
1440	341	15
1470	343	16
1500	345	16
1530	340	16
1560	335	16
1590	334	15
1620	333	15
1650	329	17
1680	324	17
1710	325	17
1740	326	16
1770	322	15
1800	317	16
1830	317	16
1860	316	16
1890	316	16
1920	315	15
1950	315	15
1980	314	15
2010	315	16
2040	315	17
2070	314	18
2100	312	20
2130	310	20

STATION ALTITUDE 3989.00 FEET MSL  
11 OCT. 79 0650 HRS NST  
ASCENSION 1.0. 416

SIGNIFICANT LEVEL DATA  
264000410  
WHITE SANDS  
TABLE 6

GEOSTATIC COORDINATES  
32.40043 LAT UEG  
106.37033 LON UEG

PRESSURE GEOMETRIC MILLIBARS	ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT
681.5	3989.0	7.8	100
656.9	4775.1	22.0	-304
650.0	5005.1	22.0	-500
611.0	6337.7	20.6	-607
712.2	9902.4	12.3	-130
700.0	10436.5	11.0	-1504
654.8	12250.2	6.8	-19.7
617.0	13624.4	5.7	-22.4
500.0	19379.3	-6.1	-31.7
464.4	21263.3	-10.8	-34.0
433.2	23009.2	-14.5	-36.4
400.0	24977.3	-19.5	-42.4
339.8	26894.7	-28.6	-46.9
300.0	31705.6	-36.4	-50.0
276.2	33658.6	-40.0	-52.0
250.0	35274.3	-45.4	-56.0
226.4	36142.6	-51.0	-61.0
209.6	39653.3	-53.0	-63.0
200.0	40664.7	-55.2	-65.2
162.8	44898.5	-64.9	-74.0
154.0	46117.6	-64.3	-74.3
150.0	46546.4	-65.9	-75.9
137.0	48263.6	-69.5	-79.5
126.2	49934.1	-70.9	-80.9
118.6	51170.5	-70.0	-80.0
108.0	52993.8	-72.1	-82.1
100.0	54444.2	-72.1	-82.1
94.4	55611.3	-73.1	-83.1
84.8	57637.9	-72.6	-82.6
70.0	61459.4	-67.0	-77.0
61.0	63967.3	-63.1	-73.1
53.0	66860.3	-63.1	-73.1
50.0	68265.0	-59.7	-69.7
42.4	71709.8	-57.4	-67.4
34.5	75019.3	-57.2	-67.2
30.0	74970.5	-53.1	-63.1
27.0	81232.1	-50.1	-60.1
25.0	82895.6	-50.1	-60.1

STATION ALTITUDE 3989.00 FEET MSL  
11 OCT. 79 0650 HRS MST  
ASSENSSION NO. 416

UPPER AIR DATA  
2040020410  
WHITE SANDS

TABLE 7

GEOMETRIC PRESSURE		TEMPERATURE AIR DEGREES CENTIGRADE		REL.HUM. DEPOINT PERCENT		DENSITY GM/CUBIC METER		SPEED OF SOUND KNOTS		WIND DATA DIRECTION, DEGREES(1,1)		INDEX OF REFRACTION	
ATMOSPHERIC ALITUDE IN MSL FEET	PRESSURE MILLIBARS	DEGREES	CENTIGRADE	PERCENT	DEPOINT	GM/CUBIC	METER	KNOTS	LEGS(1,1)	KNOTS	LEGS(1,1)	REFRACTION	
3959.0	881.5	7.8	1.2	63.0	108.9	653.9	1.0	350.2	350.2	0	0	1.000275	
4400.0	881.2	8.0	1.3	62.4	108.7	654.2	0.9	350.2	350.2	1.9	1.000260		
4500.0	881.4	17.0	1.0	33.7	103.0	664.6	0.9	350.2	350.2	3.7	1.000241		
5000.0	880.2	22.0	-5.7	15.1	100.7	669.9	0.2	350.2	350.2	5.5	1.000236		
5500.0	885.3	21.5	-6.9	14.3	98.0	669.3	0.2	350.2	350.2	7.4	1.000231		
6000.0	820.7	21.0	-8.0	13.5	97.6	666.6	0.2	349.3	349.3	9.8	1.000227		
6500.0	800.3	20.2	-9.0	13.1	95.0	667.8	0.1	348.1	348.1	12.7	1.000223		
7000.0	792.0	19.1	-9.6	13.4	94.2	666.4	0.1	347.4	347.4	15.6	1.000220		
7500.0	777.9	17.9	-10.2	13.6	92.9	665.1	0.1	342.0	342.0	15.6	1.000216		
8000.0	764.1	16.8	-10.9	13.9	91.0	663.8	0.1	336.5	336.5	15.6	1.000213		
8500.0	750.5	15.6	-11.6	14.2	90.4	662.5	0.1	330.0	330.0	15.6	1.000210		
9000.0	737.2	14.5	-12.2	14.5	89.1	661.1	0.1	321.3	321.3	15.5	1.000206		
9500.0	724.1	13.4	-12.9	14.7	87.9	659.8	0.1	312.0	312.0	15.8	1.000203		
10000.0	711.2	12.2	-13.7	14.9	86.7	655.5	0.1	311.3	311.3	17.5	1.000199		
10500.0	698.4	10.9	-15.6	14.0	85.5	650.9	0.1	309.5	309.5	19.2	1.000196		
11000.0	685.6	9.7	-16.7	13.7	84.5	649.7	0.1	309.5	309.5	19.4	1.000192		
11500.0	673.1	8.5	-17.9	13.4	83.1	648.6	0.1	309.1	309.1	18.2	1.000189		
12000.0	660.9	7.4	-19.1	13.1	82.0	647.8	0.1	308.6	308.6	16.9	1.000186		
12500.0	648.8	6.6	-20.1	12.7	80.7	641.9	0.1	305.2	305.2	14.0	1.000182		
13000.0	636.8	6.3	-20.9	12.0	79.4	631.4	0.1	299.0	299.0	11.0	1.000179		
13500.0	625.1	5.9	-21.8	11.4	77.9	621.0	0	295.3	295.3	8.7	1.000176		
14000.0	613.5	5.3	-22.7	11.0	76.7	611.0	0	294.0	294.0	6.9	1.000173		
14500.0	601.9	4.3	-23.5	11.0	75.5	649.1	1	287.2	287.2	5.0	1.000170		
15000.0	590.6	3.2	-24.4	11.0	74.4	617.8	1	287.2	287.2	4.4	1.000167		
15500.0	579.5	2.1	-25.2	11.0	73.4	640.9	1	287.0	287.0	4.4	1.000164		
16000.0	568.6	1.1	-26.0	11.0	72.1	640.3	1	285.7	285.7	4.6	1.000162		
16500.0	557.9	0	-26.9	11.0	71.1	644.0	1	282.0	282.0	5.7	1.000160		
17000.0	547.3	-1.0	-27.7	11.0	70.0	642.8	1	289.1	289.1	7.7	1.000159		
17500.0	537.0	-2.1	-28.6	11.0	69.0	641.5	1	287.0	287.0	9.7	1.000157		
18000.0	526.9	-3.2	-29.4	11.0	67.9	640.2	1	286.3	286.3	10.3	1.000154		
18500.0	517.0	-4.2	-30.2	11.0	66.5	639.5	1	283.2	283.2	11.0	1.000152		
19000.0	507.3	-5.3	-31.1	11.0	65.7	637.7	1	282.3	282.3	11.9	1.000149		
19500.0	497.6	-6.4	-31.9	11.1	64.9	630.4	1	284.5	284.5	12.0	1.000147		
20000.0	488.0	-7.6	-32.6	11.3	64.0	634.9	1	280.9	280.9	12.3	1.000145		
20500.0	478.5	-8.9	-33.4	11.6	63.0	633.4	1	281.8	281.8	12.4	1.000142		
21000.0	469.2	-10.1	-34.2	11.9	62.1	631.9	1	278.0	278.0	12.1	1.000140		
21500.0	460.0	-11.3	-35.1	11.9	61.1	629.5	1	275.6	275.6	11.9	1.000138		
22000.0	451.0	-12.4	-36.0	11.3	60.2	629.2	1	273.0	273.0	11.4	1.000135		
22500.0	442.1	-13.4	-37.3	11.3	59.5	627.9	1	272.0	272.0	10.7	1.000133		
23000.0	433.4	-14.5	-38.4	11.0	58.3	626.6	1	270.0	270.0	10.1	1.000131		

STATION ALTITUDE 3469.00 FEET MSL  
11 OCT. 79 0050 HRS MSL  
ASCENSION NO. 416

UPPER AIR DATA  
2340020410  
WHITE SANDS  
TABLE 7 (CONT)

GEODETIC COORDINATES  
32°44'04.3 LAT DEG  
106.37033 LON DEG

GEODETIC ALTITUDE MSL FEET	PRESSURE MILIBARS	TEMPERATURE AIR DEPOINT DEGREES CINTIGRADE	REL.HUM. PERCENT	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF WIND DATA	WIND DIRECTION	SPEED OF REFRACTION	INDEX
					KILOMETERS	KNOTS	DEGREES(TUN)	KNOTS	
23600.0	424.7	-15.7	-39.4	11.0	574.0	025.1	209.0	9.1	1.000129
24000.0	410.2	-17.0	-40.4	11.0	565.9	023.5	209.3	8.0	1.000127
24500.0	407.8	-18.3	-41.4	11.0	557.4	022.0	206.0	7.1	1.000125
25000.0	399.6	-19.0	-42.4	11.0	548.9	020.4	252.0	7.2	1.000123
25500.0	391.4	-20.7	-43.2	11.1	540.1	019.0	239.3	7.7	1.000121
26000.0	383.3	-21.9	-44.1	11.3	531.4	017.9	220.9	8.8	1.000119
26500.0	375.4	-23.0	-44.9	11.4	522.9	016.2	227.0	10.4	1.000117
27000.0	367.7	-24.2	-45.7	11.5	514.3	014.7	224.4	12.1	1.000115
27500.0	360.1	-25.4	-46.6	11.6	506.2	013.3	224.1	13.5	1.000113
28000.0	352.7	-26.5	-47.4	11.8	498.1	011.4	224.9	14.9	1.000111
28500.0	345.4	-27.7	-48.3	11.9	490.2	010.4	226.0	16.1	1.000110
29000.0	338.3	-28.9	-49.5	11.6**	462.4	009.9	231.3	16.6	1.000108
29500.0	331.1	-30.2	-52.3	9.5**	474.7	007.2	236.2	17.2	1.000106
30000.0	324.0	-31.6	-55.3	7.4**	467.2	005.5	241.6	17.3	1.000104
30500.0	317.1	-32.9	-59.0	5.3**	459.6	003.8	249.0	16.6	1.000103
31000.0	310.3	-34.3	-63.7	3.3**	452.0	002.1	257.1	16.2	1.000101
31500.0	303.7	-35.6	-71.6	1.2**	445.4	000.4	266.7	15.8	1.000099
32000.0	297.2	-36.8			438.0	590.9	278.5	15.7	1.000098
32500.0	290.7	-37.8			430.2	597.7	290.0	16.2	1.000096
33000.0	284.3	-38.7			426.0	596.5	300.5	18.4	1.000094
33500.0	278.1	-39.7			415.0	595.2	308.5	21.9	1.000092
34000.0	272.0	-40.8			407.9	593.8	313.9	25.7	1.000091
34500.0	265.9	-42.1			400.9	592.2	316.0	28.2	1.000089
35000.0	260.0	-43.3			394.0	590.7	318.4	30.2	1.000088
35500.0	254.2	-44.5			387.3	589.1	319.7	32.2	1.000086
36000.0	248.6	-45.7			380.7	587.5	320.9	33.1	1.000085
36500.0	242.9	-47.0			374.1	585.9	322.0	33.3	1.000083
37000.0	237.4	-48.2			367.6	584.3	323.1	33.4	1.000082
37500.0	232.0	-49.4			361.2	582.7	322.4	33.1	1.000080
38000.0	226.7	-50.7			355.0	581.1	321.0	32.9	1.000079
38500.0	221.4	-51.5			348.0	580.0	319.0	32.1	1.000078
39000.0	216.3	-52.1			341.0	579.2	317.0	32.3	1.000076
39500.0	211.3	-52.8			334.1	578.3	316.1	32.6	1.000074
40000.0	206.4	-53.8			327.7	577.0	314.0	33.1	1.000073
40500.0	201.6	-54.8			321.0	575.6	315.1	35.7	1.000072
41000.0	196.8	-56.0			315.0	574.1	315.4	38.3	1.000070
41500.0	192.0	-57.1			309.7	572.0	315.7	41.0	1.000069
42000.0	187.4	-58.3			303.0	571.1	314.0	41.8	1.000068
42500.0	182.9	-59.4			296.1	569.0	313.2	42.5	1.000066
43000.0	178.5	-60.6			292.0	568.0	313.9	43.3	1.000065

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL  
11 OCT. 79 0650 HRS NST  
ASCRN 101, 0. 410

UPPER AIR DATA  
23400±0410  
WHITE SANDS  
TABLE 7 (CONT.)

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON UEG

DEWPOINT ALTIMETER MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPONT PERCENT	REL.HUM. GM/CUBIC METER	SPEED OF WIND DATA KNOTS	INDEX OF REFRACTION
DEGREES ALTITUDE MSL FEET				DIMENSIONS DEGREES(1)		
4350.0	174.3	-61.7	287.1	500.5	310.0	44.0
4400.0	170.1	-62.8	281.7	505.0	310.7	42.0
4450.0	166.0	-64.0	276.4	505.4	310.9	39.7
4500.0	162.0	-64.8	270.9	502.3	311.1	37.4
4550.0	158.0	-64.6	265.9	505.6	311.3	35.1
4600.0	154.1	-64.3	257.1	503.0	312.4	33.2
4650.0	150.3	-65.8	252.5	501.0	314.0	31.5
4700.0	146.6	-66.9	247.6	509.6	315.7	29.6
4750.0	143.0	-67.9	242.7	509.1	317.7	28.1
4800.0	139.4	-69.0	237.0	506.7	318.6	27.5
4850.0	135.9	-69.7	232.7	505.7	319.2	27.3
4900.0	132.5	-70.1	227.3	505.1	319.7	27.1
4950.0	129.2	-70.5	222.1	504.6	320.7	26.3
5000.0	125.9	-70.9	216.8	504.1	322.4	24.6
5050.0	122.7	-70.5	211.0	504.6	324.4	23.0
5100.0	119.6	-70.1	205.3	505.1	325.4	21.3
5150.0	116.6	-70.4	200.3	504.8	326.3	19.3
5200.0	113.7	-71.0	195.8	504.0	328.8	17.3
5250.0	110.8	-71.5	191.4	503.4	328.9	16.1
5300.0	108.0	-72.1	187.1	502.4	332.9	16.1
5350.0	105.3	-72.1	182.4	502.4	336.9	16.1
5400.0	102.6	-72.1	177.7	502.4	347.2	14.8
5450.0	100.0	-72.1	175.2	502.4	350.0	13.6
5500.0	97.4	-72.6	169.2	501.8	21.5	13.7
5550.0	94.9	-73.0	165.3	501.2	31.0	13.6
5600.0	92.5	-73.0	161.0	501.1	41.3	14.3
5650.0	90.2	-72.9	156.8	501.3	46.0	14.2
5700.0	87.9	-72.8	152.4	501.5	42.0	12.0
5750.0	85.6	-72.6	146.8	501.6	37.5	9.9
5800.0	83.5	-72.1	144.6	504.3	29.0	8.1
5850.0	81.4	-71.4	140.5	505.4	17.4	6.5
5900.0	79.3	-70.7	136.5	504.4	10.5	6.2
5950.0	77.3	-69.9	132.9	505.4	4.5	6.1
6000.0	75.4	-69.2	126.0	506.4	4.0	6.0
6050.0	73.5	-68.4	125.1	507.4	5.4	5.8
6100.0	71.7	-67.7	121.5	508.4	7.7	6.2
6150.0	69.9	-66.9	116.0	509.4	7.7	7.1
6200.0	68.1	-66.2	114.7	509.5	6.9	7.9
6250.0	66.5	-65.4	111.5	501.5	12.4	6.5
6300.0	64.8	-64.6	105.3	502.6	15.0	6.9

STATION ALTITUDE 3989.00 FEET MSL  
11 OCT. 79 0630 HRS KST  
ASSEMBLY NO. 416

UPPER AIR DATA  
2040020410  
WHITE SANDS

TABLE 7 (CONT)

GEOGRAPHIC COORDINATES  
32°40'04.3 LAT DEG  
106°37'03.3 LONG DEG

GEOPHYSICAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECT. DEGREES (10)	WIND SPEED KNOTS	INDEX OF REFRACTION
6500.0	93.3	-63.8	105.3	50.5	13.7	7.5	1.000023	
6400.0	91.7	-63.1	102.3	50.4	11.5	6.0	1.000023	
6450.0	90.2	-63.1	99.8	50.4	13.0	4.4	1.000022	
6500.0	88.7	-63.1	97.4	50.4	19.0	2.9	1.000022	
6550.0	87.3	-63.1	95.0	50.4	16.4	1.2	1.000021	
6600.0	85.9	-63.1	92.7	50.4	240.3	.8	1.000021	
6650.0	84.6	-63.1	90.5	50.4	235.0	2.5	1.000020	
6700.0	82.2	-62.8	89.2	50.5	257.3	3.5	1.000020	
6750.0	80.0	-61.6	85.5	50.7	268.4	4.9	1.000019	
6800.0	78.7	-60.4	83.0	50.5	323.4	6.0	1.000018	
6850.0	77.5	-59.6	80.7	50.9	347.2	10.0	1.000018	
6900.0	76.3	-59.2	78.7	50.9	359.7	11.7	1.000018	
6950.0	74.2	-58.9	76.7	51.0	10.0	12.7	1.000017	
7000.0	72.0	-58.5	74.7	51.0	20.0	13.0	1.000017	
7050.0	69.9	-58.2	72.8	51.1	34.0	11.3	1.000016	
7100.0	67.9	-57.9	71.0	51.1	50.5	10.4	1.000016	
7150.0	64.8	-57.5	69.2	51.2	54.4	10.0	1.000015	
7200.0	61.8	-57.4	67.5	51.2	52.5	9.6	1.000015	
7250.0	59.8	-57.4	65.9	51.2	55.0	8.4	1.000015	
7300.0	59.0	-57.3	64.3	51.2	53.5	6.2	1.000014	
7350.0	56.9	-57.3	62.8	51.2	48.2	3.9	1.000014	
7400.0	53.8	-57.3	61.3	51.2	71.4	3.2	1.000014	
7450.0	51.7	-57.3	59.9	51.2	100.4	3.3	1.000013	
7500.0	50.2	-57.2	58.4	51.2	100.3	3.6	1.000013	
7550.0	39.9	-57.2	57.1	51.2	93.4	3.6	1.000013	
7600.0	36.9	-57.3	62.4	51.2	62.4	3.7	1.000012	
7650.0	34.5	-57.2	61.3	51.2	253.1	6.7	1.000011	
7700.0	33.7	-56.5	54.2	51.2	259.0	9.0	1.000011	
7750.0	32.9	-55.8	52.8	51.2	267.0	9.7	1.000011	
7800.0	32.2	-55.1	51.4	51.2	271.3	10.7	1.000010	
7850.0	31.4	-54.4	50.0	51.2	270.7	6.8	1.000010	
7900.0	30.7	-53.8	49.7	51.2	247.0	3.2	1.000010	
7950.0	30.0	-53.1	47.4	51.2	267.0	1.7	1.000010	
8000.0	29.3	-52.4	46.2	51.2	271.3	10.7	1.000010	
8050.0	28.6	-51.7	45.0	51.2	270.7	6.8	1.000010	
8100.0	27.9	-51.1	43.8	51.2	247.0	3.2	1.000010	
8150.0	27.3	-50.4	42.7	51.2	267.0	1.7	1.000010	
8200.0	26.7	-50.1	41.6	51.2	271.3	10.7	1.000009	
8250.0	26.1	-50.1	40.7	51.2	270.7	6.8	1.000009	
8300.0	25.5	-50.1	39.8	51.2	247.0	3.2	1.000009	

STATION ALTITUDE 3989.00 FEET MSL  
 11 JULT. 79 0650 HRS MST  
 ASCENSION 140. 416

MANDATORY LEVELS  
 2040020410  
 WHITE SANDS

GEODETIC COORDINATES  
 32°40'04.3 LAT DEG  
 106°37'03.3 LON DEG

TABLE 8

PRESSURE GEOPOTENTIAL MILLIBARS	DEGREES FEET	TEMPERATURE AIR DEGREE CENTIGRADE	RELATIVE HUMIDITY PERCENT	WIND DIRECTION DEGREES (IN) WEEKLYES (IN)	WIND SPEED KNOTS
850.0	5001.	22.0	55.0	15.	350.2 3.7
800.0	6718.	19.7	59.2	15.	348.7 11.1
750.0	8524.	15.6	-11.0	14.	350.2 15.6
700.0	10426.	11.0	-15.4	14.	311.5 17.3
650.0	12435.	6.7	-20.0	15.	300.7 17.1
600.0	14581.	4.1	-23.7	11.	291.6 0.5
550.0	16680.	-8	-27.5	11.	339.7 7.2
500.0	19352.	-6.1	-31.7	11.	296.5 12.0
450.0	22023.	-12.5	-36.3	12.	275.5 11.3
400.0	24936.	-19.5	-42.4	11.	255.0 7.2
350.0	28143.	-26.9	-47.7	12.	225.2 15.4
300.0	31721.	-36.4			275.0 15.7
250.0	35793.	-45.4			320.6 35.0
200.0	40565.	-55.2			315.2 36.5
175.0	43322.	-61.5			310.8 43.9
150.0	46420.	-65.9			314.0 31.4
125.0	49990.	-70.8			322.9 24.3
100.0	54325.	-72.1			2.5 15.6
80.0	58628.	-70.9			12.9 6.2
70.0	61248.	-67.0			7.7 7.0
60.0	64337.	-63.1			4.5.9 4.3
50.0	68020.	-59.7			330.4 7.8
40.0	72637.	-57.3			54.1 0.7
30.0	78633.	-53.1			200.4 9.5
25.0	82526.	-50.1			

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3451.40 FEET MSL  
 11 OCT. 79 0600 HRS MST  
 AS ELEVATION 1.0. 66

SIGNIFICANT LEVEL DATA  
 2640050000  
 APACHE

GEODETIC COORDINATES  
 32° 62' 7.00 LAT DEG  
 106° 39' 35.2 LON WEG

TABLE 9

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT
881.7	3951.4	8.0	99.0
868.4	4370.0	16.6	97.0
858.4	4694.8	18.3	95.0
850.0	4971.0	17.6	93.0
828.0	5708.5	19.4	91.0
808.0	6397.5	19.0	89.0
700.0	10375.5	10.1	81.0
666.4	11709.2	6.4	76.0
604.6	14306.2	3.1	70.2
579.2	15452.0	0.5	61.7
500.0	19277.6	-6.8	26.3
453.2	21770.7	-15.0	32.6
431.4	23001.6	-15.2	35.2
400.0	24961.5	-20.4	40.2
344.2	28466.0	-27.9	45.8
319.6	30204.4	-32.7	49.3
300.0	31659.4	-36.8	
273.4	33757.5	-40.9	
250.0	35737.9	-46.5	
221.6	38340.1	-52.5	
200.0	40504.2	-56.5	
172.2	43564.4	-63.4	
160.0	45059.1	-67.2	
155.6	45590.3	-65.5	
150.0	46347.6	-67.4	
133.4	48650.5	-72.3	
122.6	50248.5	-74.4	
116.2	51315.0	-72.3	
109.6	52443.5	-74.0	
106.4	53011.2	-75.0	
100.0	54200.7	-72.5	
94.2	55350.5	-75.0	
88.2	56617.0	-74.4	
85.4	57233.6	-76.5	
70.0	61089.6	-68.7	
60.6	63974.0	-64.0	
53.0	66688.8	-63.5	
50.0	67678.2	-60.9	
42.6	71094.9	-57.9	
32.6	76641.3	-57.9	

STATION ALTITUDE 3951.40 FEET MSL  
11 OCT. 79 0600 HRS MST  
ASCENSION NO. 66

SIGNIFICANT LEVEL DATA  
20400.0000  
APACHE

GEODETIC COORDINATES  
32.62700 LAT DEG  
106.39352 LON DEG

TABLE 9 (CONT)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEPOINT DEGREES CENTIGRAVE	REL. HUM. PERCENT
30.0	78512.5	-55.4	
26.2	81400.6	-50.7	

STATION ALTITUDE 3951.40 FEET MSL  
11 OCT 79 0000 HRS MST  
ASSENTION NO. 66

UPPER AIR DATA  
20400 JUNO  
APACHE  
TABLE 10

GEODETIC COORDINATES  
32°02'700 LAI UEG  
106°39'552 LON UEG

SEVENTHIC ALITUDE MSL MILLIBARS	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	SHIELD OF SOUND METERS	WIND DIRECT DEGREES	WIND SPEED KNOTS	ATM. DATA DEGREES	LIGHT UP REFRACTION
3951.4	861.7	8.0	2.7	69.0	1089.0	054.3	340.0	4.1
4060.0	850.1	9.0	2.8	65.3	1083.2	053.4	340.2	4.2
4260.0	804.4	17.3	2.2	36.2	1053.6	063.0	341.9	5.2
500.0	494.1	17.7	1.0	32.4	1014.2	065.3	343.1	6.3
550.0	634.2	18.9	-2.7	23.0	992.6	069.5	343.9	7.4
600.0	619.5	19.2	-5.2	18.6	974.5	069.8	344.5	8.5
660.0	305.0	18.8	-6.0	18.0	956.9	060.2	345.1	10.9
700.0	790.6	17.7	-6.9	18.0	945.5	064.9	345.5	13.7
750.0	776.5	16.5	-7.8	18.0	932.3	063.0	346.9	16.1
800.0	702.6	15.4	-9.8	18.0	919.2	062.3	348.2	18.5
850.0	749.0	14.3	-9.7	18.0	906.4	061.0	348.5	18.4
900.0	735.6	13.2	-10.6	18.0	892.7	059.7	349.4	17.5
950.0	722.5	12.1	-11.5	18.0	881.3	059.4	350.4	16.3
1000.0	709.5	10.9	-12.4	18.0	869.0	057.0	352.0	15.7
1050.0	696.8	9.8	-13.4	18.0	857.0	055.0	353.3	16.1
1100.0	684.1	8.4	-14.5	18.0	845.6	054.0	355.0	17.0
1150.0	671.6	7.0	-15.7	18.0	834.3	052.4	356.0	16.2
1200.0	659.2	6.0	-16.6	17.8	821.8	051.2	357.5	15.1
1250.0	647.0	5.4	-17.4	17.4	809.5	050.5	314.0	12.8
1300.0	635.0	4.8	-18.2	17.0	795.3	049.7	319.2	10.8
1350.0	623.3	4.1	-19.0	16.6	782.4	049.0	308.7	9.4
1400.0	611.8	3.5	-19.7	16.2	769.8	048.2	290.3	8.5
1450.0	609.4	2.7	-20.5	16.2	757.8	047.2	285.9	8.4
1500.0	599.2	1.5	-21.1	16.6	745.7	045.9	281.2	7.5
1550.0	576.1	0.4	-21.8	17.0	733.7	044.0	300.3	6.0
1600.0	565.2	-0.5	-22.6	16.9	724.3	043.4	341.3	5.5
1650.0	550.3	-1.5	-23.5	16.7	715.0	042.3	5.2	4.7
1700.0	545.7	-2.5	-24.4	16.6	701.9	041.2	8.0	6.1
1750.0	535.4	-3.4	-25.2	16.5	691.0	040.0	349.2	7.5
1800.0	525.2	-4.4	-26.1	16.3	680.3	038.9	333.4	9.2
1850.0	515.0	-5.3	-27.0	16.2	669.7	037.7	316.4	11.1
1900.0	505.4	-6.3	-27.9	16.1	659.4	036.0	305.4	13.0
1950.0	495.6	-7.4	-28.7	16.1	649.3	035.3	297.6	14.2
2000.0	485.0	-8.6	-29.6	16.3	639.7	033.8	295.0	14.9
2050.0	476.5	-9.8	-30.5	16.5	630.2	032.3	295.5	14.9
2100.0	467.2	-11.1	-31.4	16.7	620.8	030.8	292.3	14.7
2150.0	458.1	-12.3	-32.3	16.9	611.6	029.3	290.0	14.4
2200.0	449.1	-13.4	-33.3	16.8	602.1	028.0	286.0	13.9
2250.0	440.2	-14.3	-34.3	16.6	592.2	026.9	282.4	13.3
2300.0	431.4	-15.2	-35.3	16.0	582.5	025.8	279.7	12.7

STATION ALTITUDE 3951.40 FEET MSL  
11 OCT. 79 0600 HRS MET  
ASCENSION 10. 06

UPPER AIR DATA  
2340050000  
APACHE

TABLE 10 (CONT)

GEOPHYSIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL.HUM. PERCENT	DENSITY CM/CUBIC METER	WIND DATA WIND DIRECTION DEGREES (T.)	INDEX REFRACTION
3950.0	422.8	-16.6	-36.6	15.7	573.9	624.1
3940.0	414.2	-18.0	-37.9	15.5	565.5	622.4
3930.0	405.3	-19.4	-39.2	15.2	557.1	620.7
3920.0	397.7	-20.7	-40.4	15.0	548.7	275.5
3910.0	389.5	-21.0	-41.2	15.0	539.0	014.1
3900.0	381.5	-22.0	-42.0	15.3	530.7	017.8
3890.0	373.6	-23.8	-42.7	15.5	521.9	016.5
3880.0	365.9	-24.8	-43.5	15.6	513.3	013.9
3870.0	358.4	-25.9	-44.3	15.7	504.8	012.6
3860.0	351.0	-26.9	-45.1	15.9	496.5	011.3
3850.0	343.7	-28.0	-45.9	16.0	488.4	010.0
3840.0	336.5	-29.4	-46.9	16.3	480.3	009.0
3830.0	329.4	-30.8	-47.9	16.6	472.3	008.0
3820.0	322.4	-32.1	-48.9	16.9	464.0	007.0
3810.0	315.5	-33.5	-52.0	13.5**	456.7	005.7
3800.0	308.7	-34.9	-57.7	7.7**	451.5	004.4
3790.0	302.1	-36.4	-69.2	1.9**	444.4	599.5
3780.0	295.5	-37.5			436.6	593.1
3770.0	289.0	-36.4			429.0	586.8
3760.0	282.7	-39.4			421.4	579.6
3750.0	276.5	-40.4			413.9	574.4
3740.0	270.4	-41.6			406.6	562.8
3730.0	264.4	-43.0			400.2	551.0
3720.0	258.0	-44.4			393.7	549.2
3710.0	252.7	-45.7			387.3	547.4
3700.0	247.0	-47.1			390.6	545.7
3690.0	241.3	-48.3			379.0	544.2
3680.0	235.8	-49.4			367.1	532.7
3670.0	230.4	-50.6			360.6	531.2
3660.0	225.1	-51.7			354.2	529.7
3650.0	219.9	-52.8			379.7	519.4
3640.0	214.8	-53.7			370.6	517.1
3630.0	209.7	-54.6			341.0	517.1
3620.0	204.8	-55.6			334.4	517.5
3610.0	200.0	-56.5			326.0	514.7
3600.0	195.2	-57.6			321.6	513.4
3590.0	190.6	-58.7			315.6	512.0
3580.0	186.0	-59.9			309.6	510.7
3570.0	181.5	-61.0			293.0	507.5
3560.0	177.2	-62.1			292.4	506.0

\* AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3951.40 FEET MSL  
11 OCT 79 0600 HRS MST  
ASSEMBLY NO. 6

UPPER AIR DATA  
2640000000  
APACHE

TABLE 10 (CONT)

GEOPHYSICAL ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	HUMIDITY PERCENT	REL.HUM. CM/SEC/R METER	SPD OF WIND KNOTS	WIND DATA DIR/INT DEGREES (T.)	SPEED KNOTS	INDEX OF REFRACTION
4350.0	172.9	-63.2		280.9	504.5	309.7	47.3	1.000064	
4400.0	163.7	-64.5		281.0	502.8	308.0	47.4	1.000063	
4450.0	164.5	-65.8		270.4	501.0	307.4	45.5	1.000062	
4500.0	160.5	-67.0		271.2	509.3	306.6	42.2	1.000061	
4550.0	158.5	-65.9		262.9	501.0	305.1	37.2	1.000059	
4600.0	152.6	-66.5		257.5	500.0	306.3	32.6	1.000057	
4650.0	148.8	-67.7		252.4	506.4	308.6	29.6	1.000056	
4700.0	145.1	-68.8		247.3	500.9	311.3	26.9	1.000055	
4750.0	141.4	-69.9		242.4	502.0	314.3	26.5	1.000054	
4800.0	137.9	-70.9		237.5	504.0	317.4	26.1	1.000053	
4850.0	134.4	-72.0		232.0	502.0	320.4	26.7	1.000052	
4900.0	131.0	-72.8		227.7	501.5	323.4	27.4	1.000051	
4950.0	127.7	-73.4		222.6	500.6	322.2	27.0	1.000050	
5000.0	124.4	-74.1		217.7	504.7	320.6	26.5	1.000048	
5050.0	121.2	-73.9		211.9	509.9	321.0	23.4	1.000047	
5100.0	116.1	-72.9		205.5	501.3	321.3	20.1	1.000046	
5150.0	115.1	-72.7		200.0	501.6	322.2	18.1	1.000045	
5200.0	112.1	-73.7		195.9	500.2	323.3	16.2	1.000044	
5250.0	109.3	-74.6		191.8	504.9	323.9	16.0	1.000043	
5300.0	106.5	-75.0		187.2	506.4	324.4	16.0	1.000042	
5350.0	103.7	-74.0		181.4	509.0	340.7	14.1	1.000040	
5400.0	101.1	-72.9		175.9	501.2	1.0	13.7	1.000039	
5450.0	98.5	-73.3		171.7	500.8	14.7	13.9	1.000038	
5500.0	96.0	-74.6		168.4	506.9	20.1	14.5	1.000037	
5550.0	93.5	-75.5		164.3	507.8	30.3	14.7	1.000036	
5600.0	91.1	-75.0		160.1	506.4	31.1	14.4	1.000035	
5650.0	88.7	-74.5		155.6	509.1	30.9	13.5	1.000035	
5700.0	86.5	-75.7		152.5	507.4	28.6	11.6	1.000034	
5750.0	84.2	-76.0		148.8	507.1	24.9	9.8	1.000033	
5800.0	82.1	-74.9		144.3	508.5	14.0	8.7	1.000032	
5850.0	80.0	-73.9		139.9	509.9	0.0	8.0	1.000031	
5900.0	78.0	-72.9		135.0	501.3	554.3	8.5	1.000030	
5950.0	76.0	-71.9		131.5	502.0	350.3	9.3	1.000029	
6000.0	74.0	-70.9		127.5	504.0	351.7	9.1	1.000028	
6050.0	72.2	-69.9		123.7	505.4	357.1	8.3	1.000028	
6100.0	70.3	-68.9		119.9	506.8	5.6	7.5	1.000027	
6150.0	68.6	-68.0		116.5	506.5	19.7	7.0	1.000026	
6200.0	66.9	-67.2		113.1	509.1	33.0	7.0	1.000025	
6250.0	64.2	-66.4		109.9	500.2	30.0	7.7	1.000024	
6300.0	62.6	-65.0		106.6	501.3	28.7	8.5	1.000024	

STATION ALTITUDE 3451.40 FEET MSL  
 11 OCT. 79 0000 HRS MST  
 ASVERSION 1.0. 06

UPPER AIR DATA  
 24400000000  
 APACHE  
 TABLE 10 (CONT)

GEODETIC COORDINATES  
 32.02700 LAT DEG  
 106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GR/CUBIC METER	SPEED OF WIND DATA KNOTS	INDEX OF REFRACTION
5000.0	102.1	-64.9	103.7	562.4	21.7	1.0000023
4900.0	100.5	-64.0	100.8	563.4	10.7	1.0000022
4800.0	99.0	-63.9	99.3	563.5	2.3	4.5
4700.0	97.6	-63.8	97.7	563.6	5.5	1.0000022
4600.0	96.2	-63.7	96.5	563.7	5.5	1.0000021
4500.0	94.8	-63.6	94.5	563.8	5.5	1.0000021
4400.0	93.5	-63.5	91.2	563.9	5.5	1.0000020
4300.0	92.2	-62.3	89.9	564.0	22.0	1.3
4200.0	90.9	-61.7	86.5	564.0	113.0	4.4
4100.0	89.7	-60.8	85.9	564.5	60.6	2.6
4000.0	88.5	-60.3	81.5	567.7	55.0	4.9
3900.0	87.4	-59.9	79.4	568.3	48.1	1.0000018
3800.0	86.2	-59.4	77.4	569.0	43.2	7.8
3700.0	85.1	-58.9	75.3	569.8	55.2	9.2
3600.0	84.0	-58.5	73.4	570.2	26.0	10.8
3500.0	83.0	-58.0	71.5	570.4	20.3	12.5
3400.0	82.0	-57.9	69.0	571.4	10.0	13.6
3300.0	81.0	-57.9	67.9	571.9	13.3	14.7
3200.0	80.0	-57.9	66.3	571.6	9.6	14.3
3100.0	79.0	-57.9	64.8	571.6	55.1	11.1
3000.0	78.1	-57.9	63.2	571.9	55.9	8.5
2900.0	76.1	-57.9	61.7	571.6	333.9	5.7
2800.0	75.2	-57.9	60.3	571.6	347.5	2.5
2700.0	74.3	-57.9	59.8	571.6	102.3	1.5
2600.0	73.5	-57.9	57.4	571.0	144.0	6.6
2500.0	72.6	-57.9	56.1	571.0	149.0	12.2
2400.0	71.7	-57.9	54.7	571.0	151.9	13.8
2300.0	70.8	-57.9	53.4	571.0	159.7	7.7
2200.0	69.9	-57.9	52.1	572.2	230.1	2.0
2100.0	69.0	-57.9	50.7	573.1	308.0	5.1
2000.0	68.1	-56.1	49.3	574.0	321.4	8.6
1900.0	67.2	-55.4	48.0	574.9	326.7	12.7
1800.0	66.3	-54.6	45.7	575.9	314.4	9.1
1700.0	65.4	-53.8	45.5	577.0	275.6	5.7
1600.0	64.5	-53.0	44.2	578.1	300.0	1.0000010
1500.0	63.6	-52.2	43.1	579.1	41.9	560.2
1400.0	62.7	-51.4	20.7			1.0000009

STATION ALTITUDE 3951.40 FEET MSL  
 11 OCT. 79 0600 HRS MST  
 ASSEMBLAGE NO. 06

MILITARY LEVELS  
 26440050000  
 APACHE

TABLE 11

PRESSURE MILLIBARS	GEOPOTENTIAL FLEET	TEMPERATURE DEGREES CENTIGRADE	R.H. PERCENT	W.L. DEGREES (IN)	W.L., DATA DIRECTION DEGREES (IN)	SPEED KNOTS
850.0	4967.	17.6	100	33	343.0	6.3
800.0	6672.	16.4	-60.5	18	345.2	11.9
750.0	8471.	14.4	-9.0	16	346.6	18.4
700.0	10365.	10.1	-13.1	16	315.5	15.9
650.0	12369.	5.6	-17.2	17	312.5	15.4
600.0	14301.	2.6	-20.5	16	265.5	8.4
550.0	16780.	-2.1	-24.0	17	14.4	5.7
500.0	19251.	-6.6	-28.3	16	300.8	13.6
450.0	21915.	-15.3	-33.6	17	287.3	14.0
400.0	24820.	-20.4	-40.2	15	269.0	10.3
350.0	26021.	-27.1	-45.2	16	227.3	14.0
300.0	31590.	-36.6			257.7	16.9
250.0	35060.	-46.5			316.9	26.0
200.0	40400.	-56.5			308.0	34.9
175.0	45147.	-62.7			310.5	45.5
150.0	46223.	-67.4			307.7	30.7
125.0	49764.	-75.9			321.2	26.6
100.0	54040.	-72.5			7.1	15.8
80.0	58222.	-73.9			1.8	0.0
70.0	60682.	-68.7			7.2	7.4
60.0	63940.	-64.0			6.7	5.9
50.0	67020.	-60.9			57.7	4.3
40.0	72219.	-57.9			258.9	11.2
30.0	76180.	-55.4			326.5	12.5

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL  
 11 OCT. 79 0650 HRS MST  
 ASCENSION NO. 8

SIGNIFICANT LEVEL DATA  
 284022000UB  
 NW 30

GEOGRAPHIC COORDINATES  
 32.88497 LAT DEG  
 106.49714 LON DEG

TABLE 12

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
680.6	4010.4	11.4	••	48.0
671.6	4294.4	15.6	1.3	38.0
656.0	4799.7	18.1	.7	31.0
850.0	4997.3	18.1	.3	30.0
640.2	5323.3	18.6	.7	27.0
825.0	5818.7	21.3	-4.7	17.0
749.2	8549.7	16.0	-6.3	18.0
700.0	10427.8	11.5	-12.0	18.0
664.2	11838.6	7.9	-15.6	17.0
622.6	13599.4	4.5	-19.1	16.0
616.3	13871.7	5.0	-16.7	16.0
500.0	19365.9	-6.0	-28.4	15.0
447.4	22187.4	-13.5	-34.5	15.0
439.8	22615.7	-14.0	-34.9	15.0
400.0	24957.6	-20.0	-39.9	15.0
389.0	25566.9	-20.8	-40.5	15.0
323.8	30045.5	-31.5	-46.0	16.0
300.0	31767.3	-35.9		
250.0	35856.0	-45.4		
226.6	37950.8	-50.6		
200.0	40643.8	-55.4		
161.4	45047.9	-65.4		
159.7	45261.1	-63.8		
153.0	46127.2	-64.0		
150.0	46526.1	-65.1		
141.2	47732.4	-68.0		
125.8	50000.2	-71.7		
100.0	54468.0	-71.7		
82.4	58237.6	-71.7		
70.0	61448.5	-67.4		
62.4	63742.3	-66.2		
56.8	65658.4	-63.2		
51.6	67587.5	-63.5		
50.0	68231.0	-60.6		
30.0	78862.4	-55.8		
25.8	82072.1	-51.2		
20.0	87589.7	-48.0		
13.0	97007.9	-47.5		
10.2	102353.6	-44.7		

STATION ALTITUDE 4019.40 FEET MSL  
11 OCT. 79 0650 HRS MST  
ASCENSION 1.0. 8

UPPER AIR DATA  
2840220008  
NW 30

GEOGRAPHIC COORDINATES  
32.86497 LAT DEG  
106.49714 LON DEG

TABLE 13

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTIO. DEGREES(TIN)	WIND DATA KNOTS	INDEX OF REFRACTION
4019.4	860.6	11.4	48.0	1075.1	658.1	"	"	1.000270
4500.0	865.2	16.6	1.2	35.2	1037.2	604.1	359.2	2.1
5000.0	849.9	18.1	-3	30.0	1013.8	665.8	359.4	4.3
5500.0	835.0	19.6	-1.9	23.4	991.3	667.3	359.2	6.5
6000.0	820.3	20.9	-4.9	17.1	969.8	668.6	357.2	8.7
6500.0	805.8	20.0	-5.6	17.2	955.9	667.6	355.5	10.9
7000.0	791.6	19.0	-6.2	17.4	942.2	666.5	350.4	12.8
7500.0	777.7	18.0	-6.9	17.6	928.6	665.4	347.5	14.5
8000.0	764.0	17.1	-7.5	17.8	915.5	664.2	345.8	14.3
8500.0	750.5	16.1	-8.2	18.0	902.4	663.1	338.7	13.0
9000.0	737.1	14.9	-9.2	18.0	890.0	661.7	331.1	11.7
9500.0	723.9	13.7	-10.1	18.0	877.8	660.3	321.3	10.7
10000.0	710.9	12.5	-11.1	18.0	865.7	658.9	306.4	12.5
10500.0	698.1	11.3	-12.1	17.9	853.9	657.5	298.1	14.6
11000.0	685.5	10.1	-13.4	17.6	842.1	659.0	297.9	15.8
11500.0	673.0	8.8	-14.7	17.3	830.6	654.5	298.7	16.5
12000.0	660.7	7.6	-15.9	16.9	818.9	653.1	302.0	16.1
12500.0	648.6	6.6	-16.9	16.6	806.7	652.0	303.2	15.4
13000.0	636.6	5.7	-17.9	16.3	794.9	650.8	299.4	14.1
13500.0	624.9	4.7	-18.9	16.1	782.9	649.6	299.7	12.5
14000.0	613.3	4.7	-18.9	16.0	760.2	649.7	295.1	10.7
14500.0	601.7	3.7	-19.8	15.9	756.5	648.5	294.8	8.7
15000.0	590.4	2.7	-20.7	15.5	744.9	647.3	295.5	6.4
15500.0	579.3	1.7	-21.6	15.7	733.6	646.1	301.2	3.4
16000.0	568.3	0.7	-22.4	15.6	722.4	645.0	356.7	0.8
16500.0	557.6	-0.3	-23.3	15.5	711.4	643.8	6.1	1.000163
17000.0	547.1	-1.3	-24.2	15.4	700.6	642.6	1.6	3.0
17500.0	536.8	-2.3	-25.1	15.3	690.0	641.4	336.4	5.4
18000.0	526.7	-3.3	-26.0	15.2	679.5	640.2	325.3	8.0
18500.0	516.8	-4.3	-26.8	15.2	669.2	639.0	313.3	10.2
19000.0	507.0	-5.3	-27.7	15.1	659.0	637.8	304.3	12.1
19500.0	497.4	-6.4	-28.7	15.0	649.2	636.5	294.6	3.3
20000.0	487.7	-7.7	-29.7	15.0	639.7	634.9	288.3	14.1
20500.0	478.2	-9.0	-30.8	15.0	630.4	633.3	284.4	14.2
21000.0	468.6	-10.3	-31.9	15.0	621.2	631.7	282.6	14.1
21500.0	459.7	-11.7	-33.0	15.0	612.2	630.1	282.2	13.9
22000.0	450.7	-13.0	-34.1	15.0	603.4	628.4	281.9	13.6
22500.0	441.8	-13.9	-34.4	15.0	593.5	627.4	281.4	13.2
23000.0	433.0	-15.0	-35.7	15.0	584.2	626.0	279.0	13.0
23500.0	424.3	-16.3	-36.8	15.0	575.5	624.5	276.4	12.5

STATION ALTITUDE 4010.40 FEET MSL  
11 JULY 79  
ASCENSION NO. 8

UPPER AIR DATA  
2840200000  
NW 30

GEODETIC COORDINATES  
32.66497 LAT DEG  
106.49714 LON DEG

GEOMETRIC PRESSURE  
ALTITUDE  
HSL FLEI  
MILLIBARS

TEMPERATURE  
AIR DEGREES  
CENTIGRADE

REL.HUM.  
PERCENT

DEGREE

DEGREE

DEGREE

DEGREE

TABLE 13 (CONT)

GEOMETRIC PRESSURE ALTITUDE HSL FLEI MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF WIND KNOTS	WIND DATA DIRECTN. DEGREES (T.D.)	INDEX OF REFRACTION
24000.0	-415.8	-17.5	-37.8	15.0	560.6	273.0
24500.0	-407.5	-18.8	-38.9	15.0	550.1	271.0
25000.0	399.3	-20.1	-39.9	15.0	549.5	269.6
25500.0	391.2	-20.7	-40.4	15.0	539.7	269.1
26000.0	365.1	-21.8	-41.3	15.1	530.9	267.7
26500.0	375.1	-23.0	-42.2	15.2	522.4	259.4
27000.0	367.3	-24.2	-43.2	15.3	514.0	250.4
27500.0	359.7	-25.4	-44.1	15.4	505.8	229.4
28000.0	352.2	-26.6	-45.0	15.5	497.7	211.7
28500.0	344.9	-27.9	-46.0	15.7	489.8	210.2
29000.0	337.6	-29.1	-46.9	15.8	482.0	208.7
29500.0	330.7	-30.3	-47.9	15.9	474.3	207.2
30000.0	323.9	-31.5	-48.8	16.0	466.8	241.9
30500.0	316.9	-32.7	-52.7	11.5**	459.2	204.1
31000.0	310.1	-34.0	-57.7	7.0**	451.7	202.5
31500.0	303.5	-35.2	-66.5	2.4**	444.4	200.2
32000.0	296.9	-36.4	-43.4	437.0	599.4	20.0
32500.0	290.4	-37.6	-42.5	426.4	597.9	19.2
33000.0	284.0	-38.8	-41.6	422.0	590.4	245.9
33500.0	277.7	-39.9	-40.7	414.3	595.0	250.4
34000.0	271.6	-41.1	-41.1	407.7	593.5	316.1
34500.0	265.6	-42.2	-42.2	400.7	592.0	271.4
35000.0	259.7	-43.4	-43.4	426.4	597.9	268.3
35500.0	254.0	-44.6	-44.6	422.0	590.4	301.3
36000.0	248.3	-45.8	-45.8	414.3	595.0	309.9
36500.0	242.7	-47.0	-47.0	407.7	593.5	316.1
37000.0	237.2	-48.2	-48.2	400.7	592.0	271.4
37500.0	231.8	-49.4	-49.4	393.8	590.5	320.7
38000.0	226.5	-50.6	-50.6	387.1	589.0	322.7
38500.0	221.2	-51.8	-51.8	380.5	587.5	324.7
39000.0	216.1	-52.4	-52.4	373.8	585.9	324.0
39500.0	211.1	-53.3	-53.3	367.3	584.3	324.2
40000.0	206.2	-54.2	-54.2	360.9	582.7	321.1
40500.0	201.4	-55.1	-55.1	354.6	581.2	319.0
41000.0	196.6	-56.2	-56.2	347.7	580.0	314.5
41500.0	191.8	-57.3	-57.3	341.0	578.8	311.9
42000.0	187.2	-58.5	-58.5	334.5	577.6	310.0
42500.0	182.7	-59.7	-59.7	326.1	576.4	310.6
43000.0	178.3	-60.9	-60.9	321.8	575.2	311.6
43500.0	174.0	-61.9	-61.9	315.6	573.8	311.4

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL  
11 OCT. 79 0650 HRS MSL  
ASCENSION NO. 6

UPPER AIR DATA  
2340220008  
NW 30

TABLE 13 (CONT.)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEED OF SOUND KILOTS	DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	109.8	-63.0			281.6	504.7	307.6	1.000063
44500.0	105.8	-64.2			270.3	503.2	304.3	46.6
45000.0	101.8	-70.3			271.1	501.7	301.6	42.5
45500.0	157.8	-63.9			262.7	502.0	302.9	1.000059
46000.0	154.0	-64.0			250.4	503.4	304.7	33.5
46500.0	150.2	-65.0			251.4	502.0	309.2	1.000056
47000.0	146.5	-66.2			240.6	500.4	314.1	26.6
47500.0	142.9	-67.4			241.9	500.8	311.0	25.7
48000.0	139.3	-68.4			237.0	507.4	307.9	25.0
48500.0	135.8	-69.3			232.0	506.3	310.9	25.3
49000.0	132.4	-70.1			227.1	505.2	313.1	25.6
49500.0	129.0	-70.9			222.5	504.1	319.2	1.000050
50000.0	125.8	-71.7			217.5	502.9	326.0	23.3
50500.0	122.6	-71.7			212.0	501.9	325.1	22.9
51000.0	119.5	-71.7			206.7	500.9	324.6	22.6
51500.0	116.5	-71.7			201.4	502.9	322.4	21.6
52000.0	113.5	-71.7			196.3	503.9	320.3	20.5
52500.0	110.6	-71.7			191.3	502.9	321.4	18.2
53000.0	107.8	-71.7			186.5	502.9	322.7	15.8
53500.0	105.1	-71.7			181.7	502.9	331.2	14.8
54000.0	102.4	-71.7			177.1	502.9	341.0	14.4
54500.0	99.8	-71.7			172.0	502.9	359.9	14.0
55000.0	97.3	-71.7			166.3	502.9	19.3	15.0
55500.0	94.8	-71.7			164.0	502.9	26.7	1.000037
56000.0	92.4	-71.7			159.6	502.9	29.6	13.1
56500.0	90.1	-71.7			155.8	502.9	31.0	11.3
57000.0	87.8	-71.7			151.8	502.9	29.4	9.5
57500.0	85.6	-71.7			145.0	502.9	28.0	8.1
58000.0	83.4	-71.7			144.2	502.9	30.7	1.000032
58500.0	81.3	-71.3			140.4	503.4	27.4	7.4
59000.0	79.3	-70.7			136.4	504.3	6.1	1.000031
59500.0	77.3	-70.0			132.5	505.3	351.1	8.2
60000.0	75.3	-69.3			126.8	506.2	350.1	9.8
60500.0	73.5	-68.7			125.1	507.1	349.3	11.4
61000.0	71.6	-68.0			121.6	506.0	353.1	10.7
61500.0	69.8	-67.4			116.2	505.0	357.6	9.9
62000.0	68.1	-67.1			115.1	505.2	2.3	1.000026
62500.0	66.4	-66.8			112.1	505.6	6.9	1.000025
63000.0	64.8	-66.6			109.2	505.9	12.7	8.9
63500.0	63.2	-66.3			100.4	505.3	19.4	9.3

STATION ALTITUDE 4910.40 FEET MSL  
11 OCT. 79 0050 HRS MSL  
ASCENSION 1.0. 8

UPPER AIR DATA  
2640220000  
NW 30

GEODETIC COORDINATES  
32.59497 LAT deg  
106.49714 LONG deg

TABLE 13 (CONT)

GEOMETRIC ALTITUDE IN SL FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEGREESES	DEWPOINT DEGREES	REL. HUM. PERCENT	WIND DATA DEGREES (10.)	WIND SPEED KNOTS	INDEX OF REFRACTION
04000.0	61.6	-65.8			103.5	501.0	1.000023
04500.0	60.1	-65.0			100.6	502.1	1.000022
05000.0	58.6	-64.2			97.7	503.1	1.000022
05500.0	57.2	-63.4			95.0	504.2	1.000021
06000.0	55.8	-63.3			92.6	504.4	1.000021
06500.0	54.4	-63.3			90.4	504.3	1.000020
07000.0	53.1	-63.4			88.2	504.2	1.000020
07500.0	51.8	-63.5			86.1	504.1	1.000019
08000.0	50.6	-61.6			83.3	505.0	1.000019
08500.0	49.4	-60.5			80.9	506.1	1.000019
09000.0	48.2	-60.3			78.6	506.4	1.000018
09500.0	47.0	-60.0			76.9	506.7	1.000017
10000.0	45.9	-59.8			75.0	509.0	1.000017
10500.0	44.8	-59.6			73.1	509.3	1.000016
11000.0	43.8	-59.3			71.3	509.0	1.000016
11500.0	42.7	-59.1			69.0	509.9	1.000015
12000.0	41.7	-58.9			67.8	570.2	1.000015
12500.0	40.7	-58.7			66.2	570.5	1.000015
13000.0	39.8	-58.4			64.5	570.8	1.000014
13500.0	38.8	-58.2			62.9	571.1	1.000014
14000.0	37.9	-58.0			61.4	571.4	1.000014
14500.0	37.0	-57.8			59.8	571.7	1.000013
15000.0	36.1	-57.5			58.4	572.0	1.000013
15500.0	35.3	-57.3			56.9	572.3	1.000013
16000.0	34.4	-57.1			55.5	572.6	1.000012
16500.0	33.6	-56.9			54.1	572.9	1.000012
17000.0	32.8	-56.6			52.8	573.2	1.000012
17500.0	32.0	-56.4			51.5	573.5	1.000011
18000.0	31.3	-56.2			50.2	573.8	1.000011
18500.0	30.5	-56.0			49.0	574.1	1.000011
19000.0	29.8	-55.6			47.7	574.4	1.000011
19500.0	29.1	-54.9			46.5	575.0	1.000010
20000.0	28.4	-54.2			45.2	576.5	1.000010
20500.0	27.8	-53.5			44.0	577.4	1.000010
21000.0	27.1	-52.7			42.9	578.4	1.000010
21500.0	26.5	-52.0			41.8	579.3	1.000009
22000.0	25.9	-51.3			40.7	580.3	1.000009
22500.0	25.3	-51.0			39.7	580.7	1.000009
23000.0	24.7	-50.7			38.7	581.1	1.000009
23500.0	24.2	-50.4			37.8	581.5	1.000008

STATION ALTITUDE 4010.40 FEET MSL  
11 JULY 79 0050 HRS MST  
ASERIATION 0.0. 0

UPPER AIR DATA  
2340220000  
LW 30

GEOGRAPHIC COORDINATES  
32°58'49" LAT DEG  
106°49'14" LON DEG

TABLE 13 (CONT)

GEOPHYSIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY CM/CUBIC METER	SPEED OF SOUND KNOTS(M.S.)	WIND DATA DIRECT WINDS(M.S.)	INDEX OF REFRACTION
8400.0	23.6	-50.1	36.9	561.9	221.4	11.1	1.000008
8350.0	23.1	-49.3	36.0	562.6	222.4	10.2	1.000008
8300.0	22.5	-49.5	35.1	562.6	224.0	9.0	1.000008
8250.0	22.0	-49.2	34.3	563.0	226.0	7.8	1.000008
8200.0	21.5	-48.9	33.4	563.4	235.2	6.4	1.000007
8150.0	21.0	-48.6	32.6	563.7	240.3	5.2	1.000007
8100.0	20.6	-48.3	31.9	564.1	242.9	4.2	1.000007
8050.0	20.1	-48.1	31.1	564.5	242.3	3.1	1.000007
8000.0	19.6	-48.0	30.4	564.6	350.0	3.3	1.000007
8050.0	19.2	-48.0	29.7	564.6	350.4	3.7	1.000007
8000.0	18.8	-47.9	29.0	564.7	350.4	2.2	1.000006
8050.0	18.3	-47.9	28.3	564.7	10.0	.7	1.000006
8000.0	17.9	-47.9	27.7	564.7	187.7	1.1	1.000006
8050.0	17.5	-47.8	27.1	564.8	205.9	3.6	1.000006
8000.0	17.1	-47.8	26.3	564.8	209.1	6.1	1.000006
8050.0	16.7	-47.8	25.9	564.8	210.4	8.7	1.000006
8000.0	16.3	-47.8	25.3	564.9	208.0	10.5	1.000006
8050.0	16.0	-47.7	24.7	564.9	207.4	12.4	1.000006
8000.0	15.6	-47.7	24.1	564.9	208.4	14.2	1.000005
8050.0	15.3	-47.7	23.0	565.0	207.3	14.9	1.000005
8000.0	14.9	-47.7	23.0	565.0	210.5	14.5	1.000005
8050.0	14.6	-47.6	22.5	565.0	213.0	14.2	1.000005
8000.0	14.3	-47.6	22.0	565.1	217.5	13.8	1.000005
8050.0	13.9	-47.6	21.5	565.1	224.4	13.1	1.000005
8000.0	13.6	-47.6	21.0	565.2	231.9	12.6	1.000005
8050.0	13.3	-47.5	20.5	565.2	239.9	12.3	1.000005
8000.0	13.0	-47.5	20.1	565.2	240.5	12.1	1.000004
8050.0	12.7	-47.2	19.6	565.3	237.3	11.9	1.000004
8000.0	12.4	-47.0	19.1	565.3	234.0	11.7	1.000004
8050.0	12.1	-46.7	18.7	565.2	230.0	11.5	1.000004
8000.0	11.9	-46.5	18.3	565.6	227.1	11.4	1.000004
8050.0	11.6	-46.2	17.8	565.9	223.4	11.3	1.000004
8000.0	11.3	-45.9	17.4	567.2	219.7		
8050.0	11.1	-45.7	17.0	567.2			
8000.0	10.8	-45.4	16.0	567.0			
8050.0	10.6	-45.1	16.2	568.3			
8000.0	10.4	-44.9	15.8	568.6			

STATION ALTITUDE 4010.40 FEET MSL  
11 JUN. 79 0650 HRS PST  
ASSEMBLATION 1.0. 8

MANDATORY LEVELS

2040220000

LW 30

GEODETIC COORDINATES  
32.00497 LAT DEG  
106.49714 LON DEG

TABLE 14

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	RELATIVE HUMIDITY PERCENT	WIND DIRECTION DEGREES(TN)	DATA SPEED KNOTS
850.0	4994.	18.1	-5.3	30.	359.2	4.3
800.0	6705.	19.6	-5.9	17.	352.4	11.8
750.0	8513.	16.1	-8.2	16.	338.5	13.0
700.0	10416.	11.5	-12.0	16.	290.1	14.4
650.0	12430.	6.8	-16.9	17.	303.0	15.5
600.0	14571.	3.6	-19.9	16.	294.9	6.3
550.0	19060.	-1.0	-24.0	12.	9.4	2.6
500.0	19539.	-6.0	-26.4	15.	297.2	12.9
450.0	22009.	-13.1	-34.2	15.	281.9	13.6
400.0	24910.	-20.0	-39.9	15.	209.8	9.2
350.0	28124.	-27.0	-45.3	16.	231.3	18.2
300.0	31705.	-35.9	-55.9	265.9	10.0	
250.0	35776.	-45.4	-65.4	324.2	29.3	
200.0	40546.	-55.4	-75.4	311.8	35.9	
175.0	43300.	-61.6	-81.6	309.9	53.1	
150.0	46401.	-65.1	-95.1	309.3	29.8	
125.0	49931.	-71.7	-101.7	320.0	23.2	
100.0	54301.	-71.7	-101.7	357.5	13.9	
80.0	58922.	-70.9	-97.4	14.6	7.7	
70.0	61240.	-67.4	-93.4	337.0	10.1	
60.0	64401.	-64.9	-94.7	7.8		
50.0	67977.	-60.6	-90.6	280.1	4.3	
40.0	72550.	-58.5	-85.5	53.2	11.1	
30.0	78529.	-55.4	-82.4	262.3	5.4	
25.0	82365.	-50.8	-77.7	433.8	9.7	
20.0	87133.	-48.0	-74.0	290.0	3.1	
15.0	93412.	-47.7	-73.7	209.4	14.6	

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.